STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number:

Source:

Date Processed by STIC:

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,

2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE <u>CHECKER</u> <u>VERSION 4.2.2 PROGRAM</u>, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom. Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

- 1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm>, EFS Submission User Manual ePAVE)
- 2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
- 3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05): U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building. 401 Dulany Street. Alexandria, VA 22314

Revised 01/24/05

Raw Sequence Listing Error Summary

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<u>error</u>	DETECTED	SUGGESTED CORRECTION SERIAL NUMBER (4) \$36,669
ATTN: 1	NEW RULES CASES:	PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE
1	_Wrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
2	_Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.
3	_Misaligned Amino Numbering	The numbering under each 5 th amino acid is misaligned. Do not use tab codes between numbers; use space characters , instead.
4	_Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
5	_Variable Length	Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules , each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
6	_PatentIn 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
7	_Skipped Sequences (OLD RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped
		Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
8	_Skipped Sequences (NEW RULES)	Sequence(s) missing. If intentional , please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000
9	_Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
· 10	Invalid <213> Response	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
11	Use of <220>	Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
12	PatentIn 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
13	Misuse of n/Xaa	"n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid

AMC - Biotechnology Systems Branch - 09/09/2003



PCT

RAW SEQUENCE LISTING

file://C:\CRF4\Outhold\VsrJ536664.htm

DATE: 06/07/2005

PATENT APPLICATION: US/10/536,664

TIME: 11:14:24

Input Set : D:\20050701-SEQ.txt

```
3 <110> APPLICANT: Imperial College Innovations
      5 <120> TITLE OF INVENTION: Control of Apoptosis
      7 <130> FILE REFERENCE: ICOY/P29703PC
C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/536,664
C--> 9 <141> CURRENT FILING DATE: 2005-05-27
      9 <160> NUMBER OF SEQ ID NOS: 19
     11 <170> SOFTWARE: PatentIn version 3.1
     13 <210> SEQ ID NO: 1
     14 <211> LENGTH: 36
     15 <212> TYPE: PRT
     16 <213> ORGANISM: Artificial
     18 <220> FEATURE:
     19 <223> OTHER INFORMATION: Derivative of SAP18
     21 <220> FEATURE:
     22 <221> NAME/KEY: MISC FEATURE
     23 <222> LOCATION: (1)..(3)
     24 <223> OTHER INFORMATION: (A linker amino acid sequence
    27 SEQUENCE: 1
28 Xaa Xaa Xaa Met Al
        Xaa Xaa Xaa Met Ala Val Glu Ser Arg Val Thr Gln Glu Glu Ile Lys
                                               10
     33 Lys Glu Pro Olu Lys Pro Ile Asp Arg Glu Lys Thr Cys Pro Leu Leu
                                                           Does Not Comply
Corrected Diskette Monded

(PS.1-2)

PLS See item#13 on
error summany
Sheet
                               ls explain "Xaa" locations.
     37 Leu Arg Val Phe
     41 <210> SEQ ID NO:
     42 <211> LENGTH: 32
     43 <212> TYPE: PRT
     44 <213> ORGANISM: Artificial
     46 <220> FEATURE:
     47 <223> OTHER INFORMATION: Derivative of MAD1
     49 <220> FEATURE:
     50 <221> NAME/KEY: MISC FEATURE
     51 <222> LOCATION: (1)..(3)
     52 <223> OTHER INFORMATION: (A linker amino acid sequence
     55 400> SEQUENCE: 2
  -> 5/ Xaa Xaa Xaa)Met Asn Ile Gln Met Leu Leu Glu Ala Ala Asp Tyr Leu
                                               10
     61 Glu Arg Arg Gru Arg Glu Ala Glu His Gly Tyr Ala Ser Met Leu Pro
                    20
                                     pls explain 'Kaa" locations,

-XI: "Xaa" can only represent a

Single amino acid,
677/05
     65 <210> SEQ ID NO:
     66 <211> LENGTH: 10
     67 <212> TYPE: PRT
     68 <213> ORGANISM: Artificial
```

10/536,664

10
22
Pls explain Source
PASE 2

Artificial Pls explain Source
OF
Artificial OF
Material.

<400> 10 gggtgtgggg tutgtgtgtg gt

<211>

<220>

22

7 See item# Il on error summary sheet.

The type of errors shown exist throughout to Cuquence Listing. Please check subsequent sequences for similar errors.



DATE: 06/07/2005

TIME: 11:14:24

RAW SEQUENCE LISTING PATENT APPLICATION: US/10/536,664

Input Set : D:\20050701-SEQ.txt

```
70 <220> FEATURE:
    71 <223> OTHER INFORMATION: NLS peptide sequence
    73 <400> SEQUENCE: 3
     75 Asp Asp Pro Lys Lys Lys Arg Lys Val
    76 1
    79 <210> SEQ ID NO: 4
     80 <211> LENGTH: 16
     81 <212> TYPE: PRT
     82 <213> ORGANISM: Artificial
     84 <220> FEATURE:
     85 <223> OTHER INFORMATION: Antennapedia homeodomain based penetratins
     87 <400> SEQUENCE: 4
     89 Arg Gln Ile Lys Ile Trp Phe Gln Asn Arg Arg Met Lys Trp Lys Lys
     93 <210> SEQ ID NO: 5
     94 <211> LENGTH: 15
     95 <212> TYPE: PRT
     96 <213> ORGANISM: Artificial
     98 <220> FEATURE:
     99 <223> OTHER INFORMATION: TAT penetratin
     101 <220> FEATURE:
     102 <221> NAME/KEY: MISC FEATURE
     103 <222> LOCATION: (1)..(1)
     104 <223> OTHER INFORMATION: Cys-acetamidomethyl
     107 <400> SEQUENCE: 5
W--> 109 Xaa Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Pro Gln Cys
     110 1
                                             10
     113 <210> SEQ ID NO: 6
     114 <211> LENGTH: 911
     115 <212> TYPE: DNA
     116 <213> ORGANISM: Homo sapiens
    118 <400> SEQUENCE: 6
    119 tgattgaaga cacccctcg tccaaqaatq caaaqcacat ccaataaaat aqctqqatta
                                                                                60
    121 taactcctct tetttetetg ggggecgtgg ggtgggaget ggggegagag gtgeegttgg
                                                                               120
    123 cccccgttgc ttttcctctg ggaaggatgg cgcacgctgg gagaacgggg tacgacaacc
                                                                               180
    125 gggagatagt gatgaagtac atccattata agctgtcgca gaggggctac gagtgggatg
                                                                               240
     127 cgggagatgt gggcgccgcg cccccggggg ccgccccgc accgggcatc ttctcctccc
                                                                               300
    129 agecegggea caegececat ceagecgeat eeegegaeee ggtegeeagg acetegeege
                                                                               360
    131 tgcagacccc ggctgccccc ggcgccgccg cggggcctgc gctcagcccg gtgccacctg
                                                                               420
    133 tggtccacct ggccctccgc caagccggcg acgacttctc ccgccgctac cgcggcgact
                                                                               480
    135 tcgccgagat gtccagccag ctgcacctga cgcccttcac cgcgcgggga cgctttgcca
                                                                               540
    137 cggtggtgga ggagctette agggacgggg tgaactgggg gaggattgtg gcettetttg
                                                                               600
    139 agtteggtgg ggteatgtgt gtggagageg teaaceggga gatgtegeee etggtggaea
                                                                               660
    141 acategeest gtggatgact gagtacetga aceggeaest geacacetgg atecaggata
                                                                               720
    143 acggaggctg ggtaggtgca tctggtgatg tgagtctggg ctgaggccac aggtccgaga
                                                                               780
    145 tcgggggttg gagtgcgggt gggctcctgg gcaatgggag gctgtggagc cggcgaaata
                                                                               840
    147 aaatcagagt tgttgcttcc cggcgtgtcc ctacctcctc ctctggacaa aqcqttcact
                                                                               900
    149 cccaacctga c
                                                                               911
    152 <210> SEQ ID NO: 7
```



DATE: 06/07/2005

TIME: 11:14:24

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/536,664

Input Set : D:\20050701-SEQ.txt

153	<211> LENG	TH: 6030					
	<212> TYPE: DNA						
	<213> ORGANISM: Homo sapiens						
	<400> SEQUENCE: 7						
			ctctgggaaa	tatoococac	actadasass	caccatacca	60
							120
			agtacatcca				180
			ccgcgcccc				240
			cccatacagc				300
			ccccggcgc				
			tccgccaggc				360
			ggcagctgca				420
			tetteaggga				480
			tgtgtgtgga				540
			tgactgagta				600
			cctttgtgga				660
			tgaagactct				720
			gccacaagtg				780
			tagaaataat				840
			aaaataacac				900
			cagtcttcag				960
			tttacattat				1020
			tttggaaatc				1080
			gtgcctgtaa				1140
			acggatggaa				1200
			gagaaggtgt				1260
			gggttcctgt				1320
			actcacatga				1380
			cccactgaga				1440
			agtattttt				1500
			atccagtacc				1560
			tcccaatact				1620
			atttcggtga				1680
214	gagcatcagg	ccgccacaag	tgcctgcttt	taggagaccg	aagtccgcag	aacctgcctg	1740
			gtcctggaac				1800
			tggtctccga				1860
220	cactgtcaag	aaagagcagt	agaggggtgt	ggctgggcct	gtcaccctgg	ggccctccag	1920
222	gtaggcccgt	tttcacgtgg	agcatgggag	ccacgaccct	tcttaagaca	tgtatcactg	1980
224	tagagggaag	gaacagaggc	cctgggccct	tcctatcaga	aggacatggt	gaaggctggg	2040
			ccacggccca				2100
228	tgtggccttg	gcccacctgt	gagtttaaag	caaggcttta	aatgactttg	gagagggtca	2160
230	caaatcctaa	aagaagcatt	gaagtgaggt	gtcatggatt	aattgacccc	tgtctatgga	2220
			ttgtcactgt				2280
			tatgggggtt				2340
			aagaagtaac				2400
			agtttagaat				2460
			ccatttatct				2520
			tttcgaaagc				2580
			ttagttatgg				2640
			atctcttgat				2700
		J J	,			. 55-5-5-5-	_ ,



RAW SEQUENCE LISTINGPATENT APPLICATION: **US/10/536,664**DATE: 06/07/2005

TIME: 11:14:24

Input Set : D:\20050701-SEQ.txt

248	agccctgagt	ctcagctacc	taagaaaaac	ctggatgtca	ctggccactg	aggagctttg	2760
250	tttcaaccaa	gtcatgtgca	tttccacgtc	aacagaattg	tttattgtga	cagttatatc	2820
252	tgttgtccct	ttgaccttgt	ttcttgaagg	tttcctcgtc	cctgggcaat	tccgcattta	2880
254	attcatggta	ttcaggatta	catgcatgtt	tggttaaacc	catgagattc	attcagttaa	2940
256	aaatccagat	ggcaaatgac	cagcagattc	aaatctatgg	tggtttgacc	tttagagagt	3000
258	tgctttacgt	ggcctgtttc	aacacagacc	cacccagagc	cctcctgccc	tccttccgcg	3060
260	ggggctttct	catggctgtc	cttcagggtc	ttcctgaaat	gcagtggtgc	ttacgctcca	3120
262	ccaagaaagc	aggaaacctg	tggtatgaag	ccagacctcc	ccggcgggcc	tcagggaaca	3180
264	gaatgatcag	acctttgaat	gattctaatt	tttaagcaaa	atattattt	atgaaaggtt	3240
266	tacattgtca	aagtgatgaa	tatggaatat	ccaatcctgt	gctgctatcc	tgccaaaatc	3300
268	attttaatgg	agtcagtttg	cagtatgctc	cacgtggtaa	gatcctccaa	gctgctttag	3360
270	aagtaacaat	gaagaacgtg	gacgctttta	atataaagcc	tgttttgtct	tctgttgttg	3420
272	ttcaaacggg	attcacagag	tatttgaaaa	atgtatatat	attaagaggt	cacgggggct	3480
274	aattgctggc	tggctgcctt	ttgctgtggg	gttttgttac	ctggttttaa	taacagtaaa	3540
					gctgcacttg		3600
					aagcaatgaa		3660
					attatatcta	-	3720
					gggattcaca		3780
					ctcctcttta	-	3840
					gacaagggct		3900
					cccagtccct		3960
					tatggccatc		4020
					atttggaata		4080
					cattctctcc	•	4140
					atctttgttt		4200
					aattaggaag		4260
					cagggcaatc		4320
					gcaaatagtc		4380
					ttaaactcta		4440
					tcacttatag		4500
					acaagccatt		4560
					gtgtcttttg		4620
					tgtcaagctt		4680
					gattttttt		4740
					acaatttta		4800
					aaccagaact		4860
					ccttgtgtga		4920
					catcagcatg		4980
					gatatgtcta		5040
					gacaaccttc		5100
					aaaaatttta		5160
					tagtcttacc		5220
					catgaaatat		5280
					ccggttcatc		5340
					gttgttctgc		5400
					tcgctcaatc		5460
					taaatccatg		5520
					cattaagttt		5580
					ggggaagctt		5640
	J	55-5-30			2222442666		2310



DATE: 06/07/2005

TIME: 11:14:24

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/536,664

Input Set : D:\20050701-SEQ.txt

346	gttttgttta	ttataccttc	ttaagttttc	aaccaaggtt	tgcttttgtt	ttgagttact	5700
348	ggggttattt	ttgttttaaa	taaaaataag	tgtacaataa	gtgtttttgt	attgaaagct	5760
350	tttgttatca	agattttcat	acttttacct	tccatggctc	tttttaagat	tgatactttt	5820
352	aagaggtggc	tgatattctg	caacactgta	cacataaaaa	atacggtaag	gatactttac	5880
354	atggttaagg	taaagtaagt	ctccagttgg	ccaccattag	ctataatggc	actttgtttg	5940
356	tgttgttgga	aaaagtcaca	ttgccattaa	actttccttg	tctgtctagt	taatattgtg	6000
	aagaaaaata						6030
361	<210> SEQ I	D NO: 8					
362	<211> LENGT	H: 2610					
363	<212> TYPE:	DNA					
364	<213> ORGAN	IISM: Homo s	sapiens				
366	<400> SEQUE	ENCE: 8					
367	atcctgggac	agggcacagg	gccatctgtc	accaggggct	tagggaaggc	cgagccagcc	60
369	tgggtcaaag	aagtcaaagg	ggctgcctgg	aggaggcagc	ctgtcagctg	gtgcatcaga	120
	ggctgtggcc						180
373	gcgggagcct	cgggcaccat	gagcgacgtg	gctattgtga	aggagggttg	gctgcacaaa	240
	cgaggggagt						300
377	ttcattggct	acaaggagcg	gccgcaggat	gtggaccaac	gtgaggctcc	cctcaacaac	360
	ttctctgtgg						420
	atccgctgcc						480
	gagcgggagg						540
	gaggaggaga						600
387	gaggtgtccc	tggccaagcc	caagcaccgc	gtgaccatga	acgagtttga	gtacctgaag	660
389	ctgctgggca	agggcacttt	cggcaaggtg	atcctggtga	aggagaaggc	cacaggccgc	720
391	tactacgcca	tgaagatcct	caagaaggaa	gtcatcgtgg	ccaaggacga	ggtggcccac	780
	acactcaccg						840
395	tactctttcc	agacccacga	ccgcctctgc	tttgtcatgg	agtacgccaa	cgggggcgag	900
397	ctgttcttcc	acctgtcccg	ggaacgtgtg	ttctccgagg	accgggcccg	cttctatggc	960
	gctgagattg						1020
401	ctcaagctgg	agaacctcat	gctggacaag	gacgggcaca	ttaagatcac	agacttcggg	1080
	ctgtgcaagg						1140
405	tacctggccc	ccgaggtgct	ggaggacaat	gactacggcc	gtgcagtgga	ctggtggggg	1200
407	ctgggcgtgg	tcatgtacga	gatgatgtgc	ggtcgcctgc	ccttctacaa	ccaggaccat	1260
409	gagaagcttt	ttgagctcat	cctcatggag	gagatccgct	tcccgcgcac	gcttggtccc	1320
411	gaggccaagt	ccttgctttc	agggctgctc	aagaaggacc	ccaagcagag	gcttggcggg	1380
	ggctccgagg						1440
415	cacgtgtacg	agaagaagct	cagcccaccc	ttcaagcccc	aggtcacgtc	ggagactgac	1500
417	accaggtatt	ttgatgagga	gttcacggcc	cagatgatca	ccatcacacc	acctgaccaa	1560
419	gatgacagca	tggagtgtgt	ggacagcgag	cgcaggcccc	acttccccca	gttctcctac	1620
	tcggccagca						1680
423	ggagaggcgg	cctcgtgcca	tgatctgtat	ttaatggttt	ttatttctcg	ggtgcatttg	1740
425	agagaagcca	cgctgtcctc	tcgagcccag	atggaaagac	gtttttgtgc	tgtgggcagc	1800
427	accctcccc	gcagcggggt	agggaagaaa	actatcctgc	gggttttaat	ttatttcatc	1860
429	cagtttgttc	tccgggtgtg	gcctcagccc	tcagaacaat	ccgattcacg	tagggaaatg	1920
431	ttaaggactt	ctacagctat	gcgcaatgtg	gcattggggg	gccgggcagg	tcctgcccat	1980
433	gtgtcccctc	actctgtcag	ccagccgccc	tgggctgtct	gtcaccagct	atctgtcatc	2040
	tctctggggc						2100
437	tgctggccag	caccctctcc	tgggggtggc	aggcacacag	cagcccccca	gcactaaggc	2160
	cgtgtctctg						2220

RAW SEQUENCE LISTING ERROR SUMMARY PATENT APPLICATION: US/10/536,664

DATE: 06/07/2005 TIME: 11:14:25

Input Set : D:\20050701-SEQ.txt

Output Set: N:\CRF4\06072005\J536664.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; Xaa Pos. 1,2,3

Seq#:2; Xaa Pos. 1,2,3

Seq#:5; Xaa Pos. 1

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1,2,3,4,5,10,11,12,13,14,15,16,17,18,19



VERIFICATION SUMMARY

PATENT APPLICATION: US/10/536,664

DATE: 06/07/2005 TIME: 11:14:25

Input Set : D:\20050701-SEQ.txt

Output Set: N:\CRF4\06072005\J536664.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application No

L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:29 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0 L:57 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0 L:109 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0